

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a new Intersection Control Beacon at the intersection of Old National Pike and Mussetter Road in Frederick County, Maryland. Old National Pike is considered to run in an east/west direction.

II. INTERSECTION OPERATION

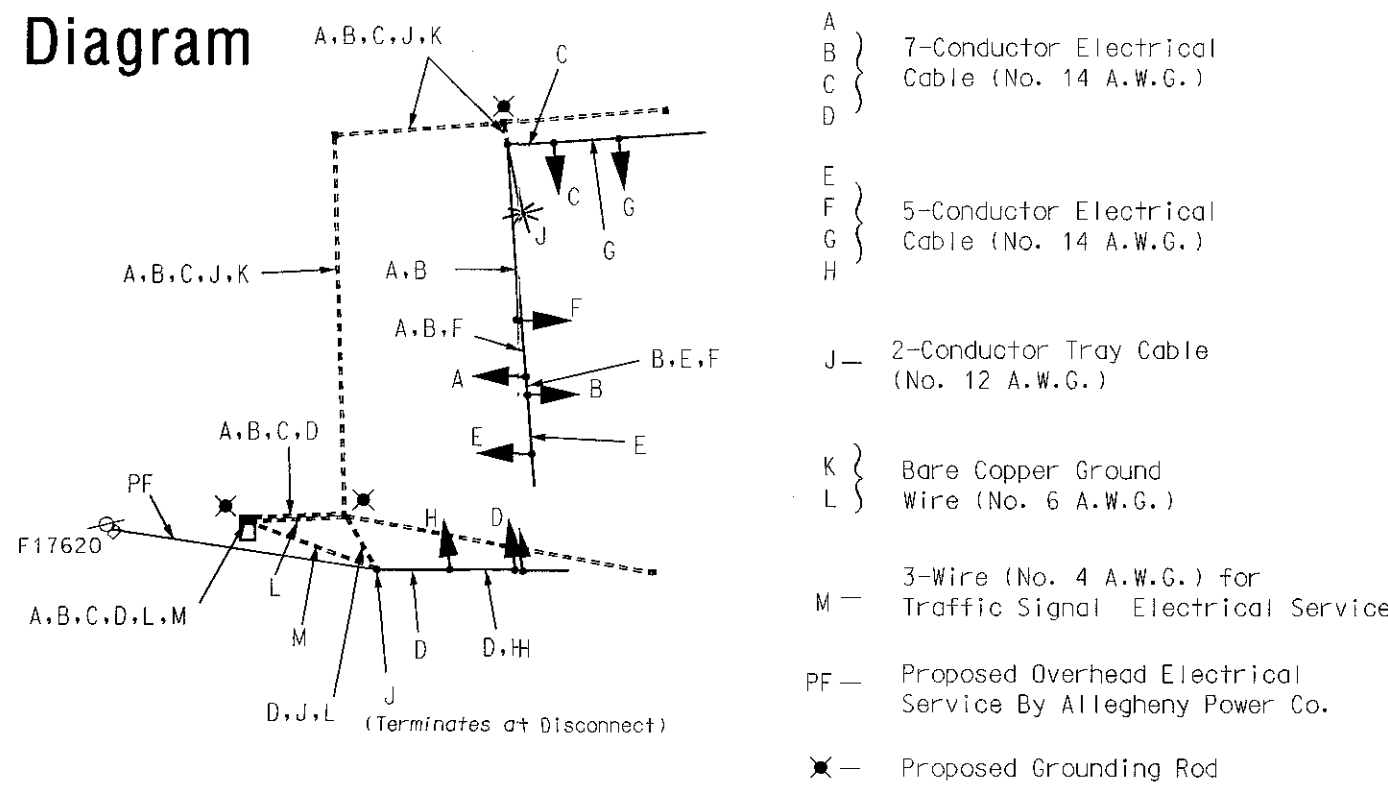
The intersection is to operate in a flashing mode. The Old National Pike movements will operate in a flashing yellow mode. The Mussetter Road movements will operate in a flashing red mode.

An eight phase, full-traffic-actuated, controller cabinet with a 2 circuit flasher will be installed at this location. (Cabinet will be utilized for future traffic signal).

CONSTRUCTION DETAILS

- Install base mounted NEMA- 6 cabinet, and all necessary equipment.
- Install 27 ft. steel mast arm pole with 38 ft. mast arm, vehicle signal heads and all necessary equipment for an overhead electrical MD-SHA Type B-14 service (Note: one 3 in. PVC and one 2 in. PVC conduit bends).
- Install 27 ft. steel twin mast arm pole with a 40 (cut from a 50 ft.) and 70 ft. mast arms, vehicle signal heads, 15 ft. luminaire arm, and 250 watt HPS luminaire (Note: one 3 in. PVC conduit bend).
- Install handhole.
- Install 3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
- Install 4 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
- Install 4 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
- Install 24 in. wide pavement marking - white for stop line.
- Install ground mounted sign as shown.
- Remove and replace ground mounted sign as shown.
- To be installed by others.
- Proposed overhead electrical service by Allegheny Power Co.
- Install 2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.

Wiring Diagram



CONTACT LIST

The contact persons for District #7 are as follows:

Neil C. Spiller
Frederick County Traffic Engineering
301-696-2930

Mr. Dave Coyne
Assistant District Engineer - Maintenance
301-624-8105

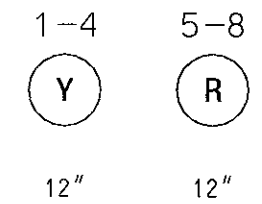
Mr. John Concannon
Assistant District Engineer - Traffic
301-624-8140

Mr. Richard L. Daff
Chief, Traffic Operations Division
410-787-7650

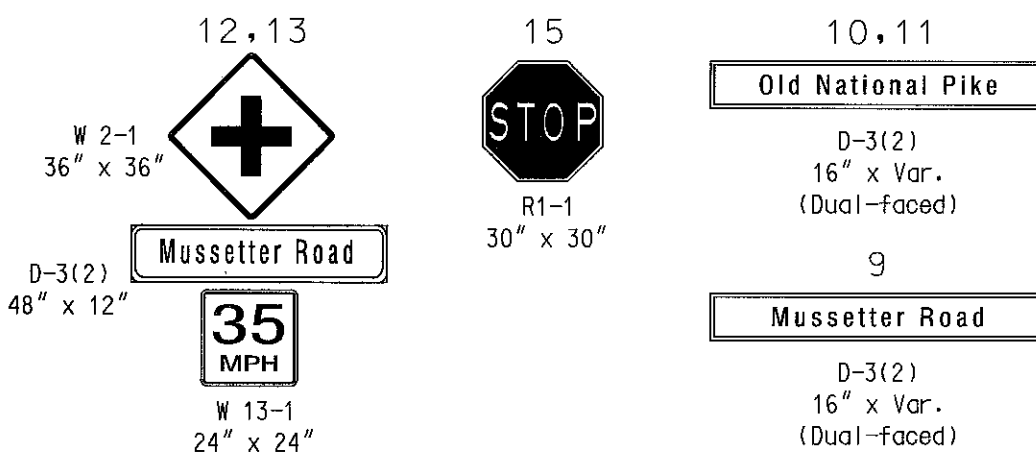
Mr. Jim Buckalew
Assistant District Engineer - Utility
301-624-8115

The Power Company Representative is:
Allegheny Power Company
Brian Manville
421 E. Patrick Street
Frederick, Maryland 21701
301-594-4474
WR# 501604

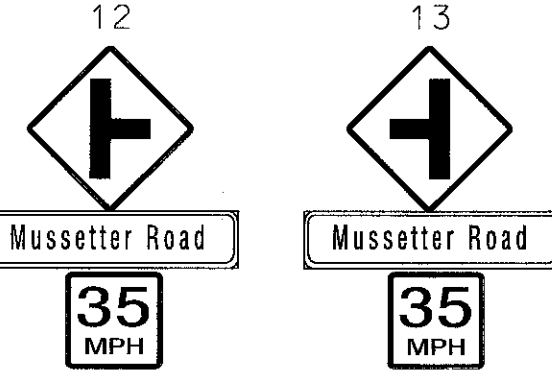
PROPOSED SIGNALS



PROPOSED SIGNALS



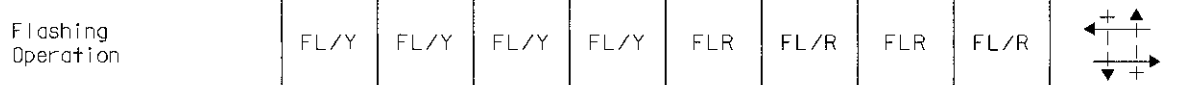
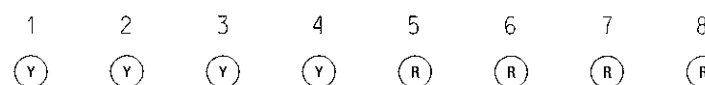
EXISTING SIGNALS TO BE REMOVED



EXISTING SIGN



Phase Chart



NOTES

- Geometrics shall be confirmed prior to the installation of signal equipment. All signal equipment to be installed at final grade.
- Conduits shall be installed prior to the installation of pavement markings and final paving.
- Pavement markings detailed are proposed and are to be installed by the Contractor in accordance with MD-SHA standards. All other pavement markings will either be installed as part of the Developer's project or are to be considered as existing.
- All underground and overhead utilities shown on these plans are schematic and are not to be considered complete. The Contractor shall be responsible for notifying all utility companies prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal equipment will occur, the Contractor shall notify the appropriate Project Engineer immediately.

EQUIPMENT LIST

A. Approved S.H.A. equipment to be purchased by the Developer and installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

B. Equipment to be furnished and/or installed by the Contractor. All equipment in this list shall have catalog cuts submitted for approval prior to installation.

Quantity	Units	Specification	Description	Quantity	Units	Specification	Description
1	EA	818	27 ft. steel mast arm pole with a 38 ft. mast arm.	Lump Sum	LS	108	Mobilization.
1	EA	818	27 ft. steel twin mast arm pole with 50 ft. and 70 ft. mast arms.	Lump Sum	LS	104	Maintenance of traffic.
1	EA	816	Standard S.H.A. traffic signal base mounted cabinet, and 2-circuit flasher [Note: Cabinet shall be purchased from Econolite and delivered to the S.H.A. signal shop for wiring and testing. Contact Mr. Ed Rodenhizer (410) 787-7650].	1	CY	205	Test pit excavation.
4	EA	814	12 in., one-way, one section (R) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visor.	5	EA	811	Handhole.
4	EA	814	12 in., one-way, one section (Y) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visor.	210	LF	810	2-conductor tray cable (No.12 A.W.G.).
3	EA	813	16 in. x Var. D-3(2) (Dual Faced) sign for under mast arm mounting.	120	LF	810	5-conductor electrical cable (No. 14 A.W.G.).
2	EA	813	36 in. x 36 in. W 2-1 sign for ground mounting.	945	LF	810	7-conductor electrical cable (No.14 A.W.G.).
2	EA	813	48 in. x 12 in. D-3(2) sign for ground mounting.	60	LF	810	3-wire (No. 4 A.W.G.) electrical cable.
2	EA	813	24 in. x 24 in. W 13-1 sign for ground mounting.	180	LF	804	Bare copper stranded ground wire (No. 6 A.W.G.).
1	EA	813	30 in. x 30 in. R1-1 sign for ground mounting.	30	LF	805	2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
1	EA	806	15 ft. Luminaire arm.	20	LF	805	3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
1	EA	806	250 w H.P.S. lamp and luminaire.	250	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.
				40	LF	805	4 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.
				8.55	CY	801	Concrete foundation for traffic signal equipment.
				3	EA	804	Ground rod 3/4 in. diameter x 10 ft. length.
				1	EA	807	Control and distribution equipment (120/240 V. one phase, three wire system) for a type B-14 overhead electrical service.
				36	LF	---	4 in. x 6 in. wood sign support.
				25	LF	556	24 in. wide white HAPPTM - for stop line.
				Lump Sum	LS	---	As-built for S.H.A. [on CAD].

GEOMETRIC LEGEND

EXISTING GEOMETRICS
PROPOSED GEOMETRICS

UTILITY LEGEND

GAS MAIN
WATER MAIN
SEWER MAIN
ELECTRIC CABLES
STORM DRAIN
AERIAL CABLES
TELEPHONE CABLES



REVISIONS

APPROVALS

Amey H. Beale 12-18-2001
TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION

T. H. 12/18/01
ASST. CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

P. D. 12/18/01
CHIEF, TRAFFIC ENGINEERING DESIGN DIVISION

D. J. 12/18/01
DIRECTOR, TRAFFIC & SAFETY



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION
(Traffic Signal Plan)

Old National Pike at Mussetter Road

DRAWN BY: Frank Hoeckel
CHECKED BY:
SCALE: 1" = 20'
DATE: December 11, 2001

F.A.P. NO. N/A
S.H.A. NO. BW996M82
COUNTY: Frederick
LOG MILE:

TS NO. 4148
T.J.M.S. NO. E-920
SHEET NO. 1 OF 1